

Investments and Pensions Oversight Committee

Tuesday, September 9, 2014

ERB Update

Jan Goodwin, Allan Martin, and Bob Jacksha

Mary Lou Cameron, Board Chair

H. Russell Goff, Board Vice Chair

Recent Investment Highlights

- Investment earnings for the twelve months ended June 30th were approximately \$1.46 billion, a return of 14.5%, net of investment management fees.
- Investment earnings for the five year period ended June 30th were approximately \$5.62 billion, a return of 12.6%, net of investment management fees.
- Portfolio returns equaled or exceeded actuarial target in most periods measured.
- Actual returns exceeded policy index in all periods measured.
- All-time high of \$11.3B at June 30th (exceeding previous all time high of \$11.2B at May 31st).

Basic Pension Equilibrium Formula

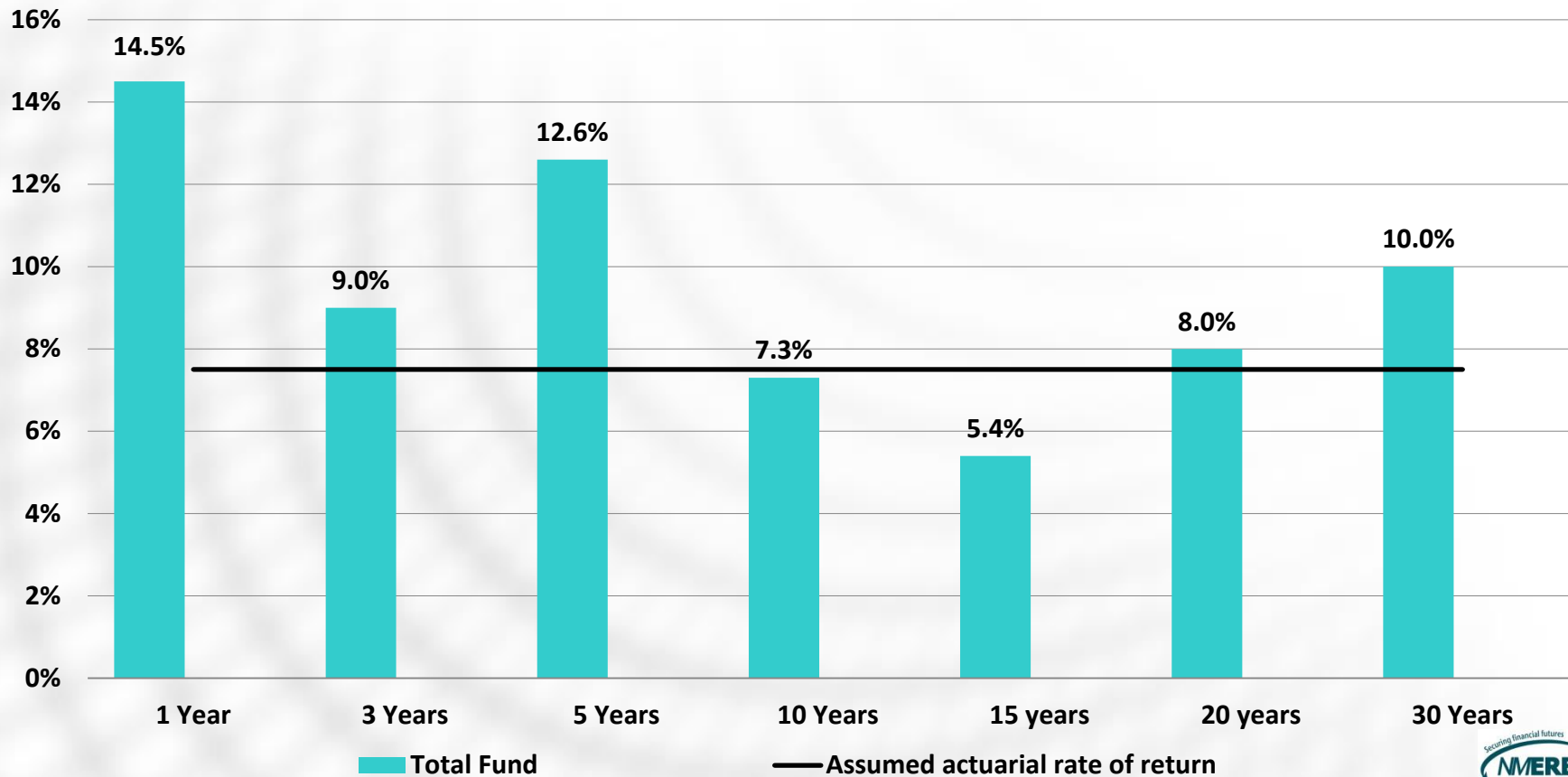
$$C+I=B+E$$

- C=Contributions from employees and employers
- I=Investment Returns
- B=Benefits paid
- E=Expenses of the Fund

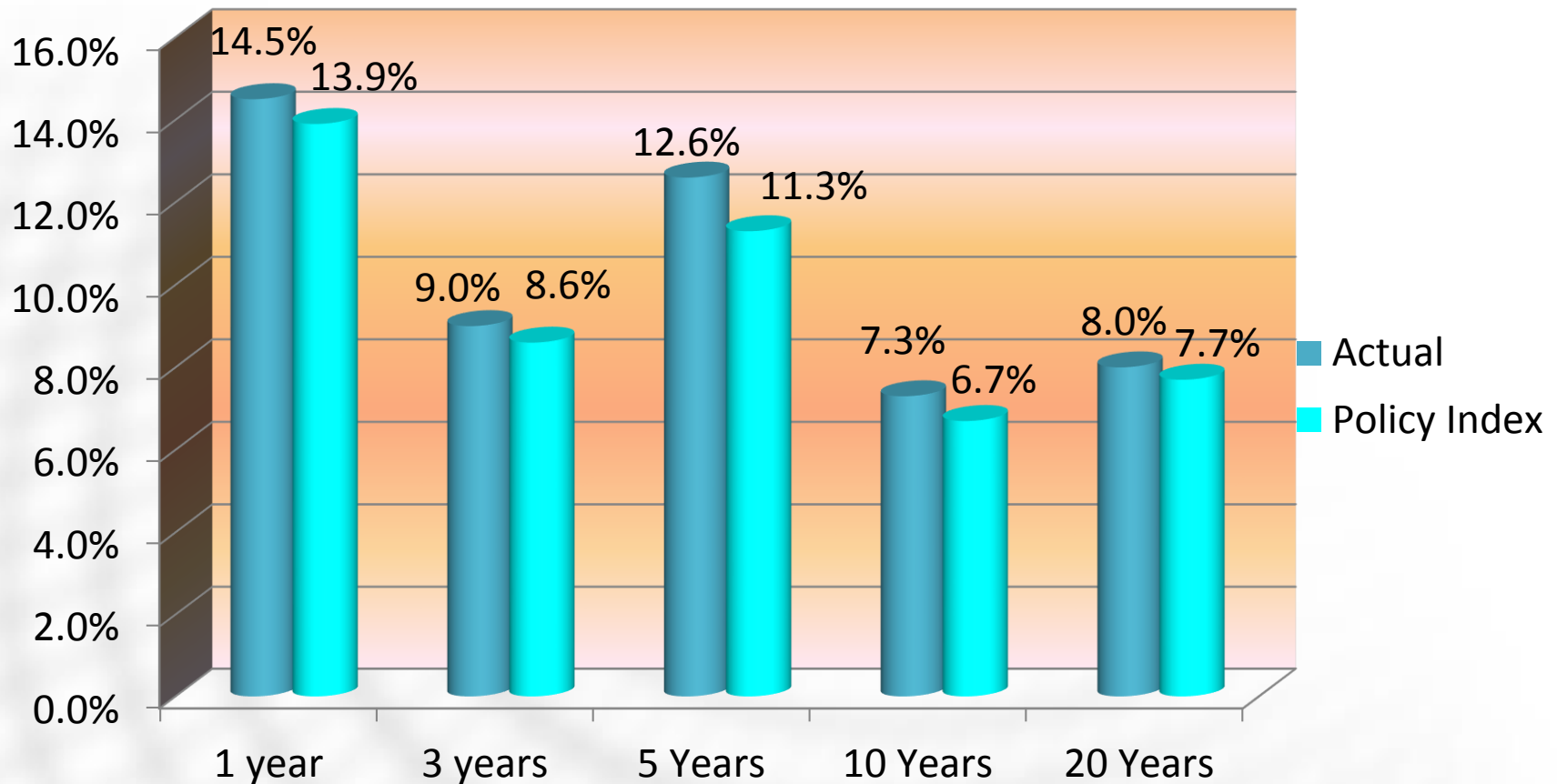
In our case, “I” must equal or exceed 7.75%

Return – Actual Exceeds 7.75% Target

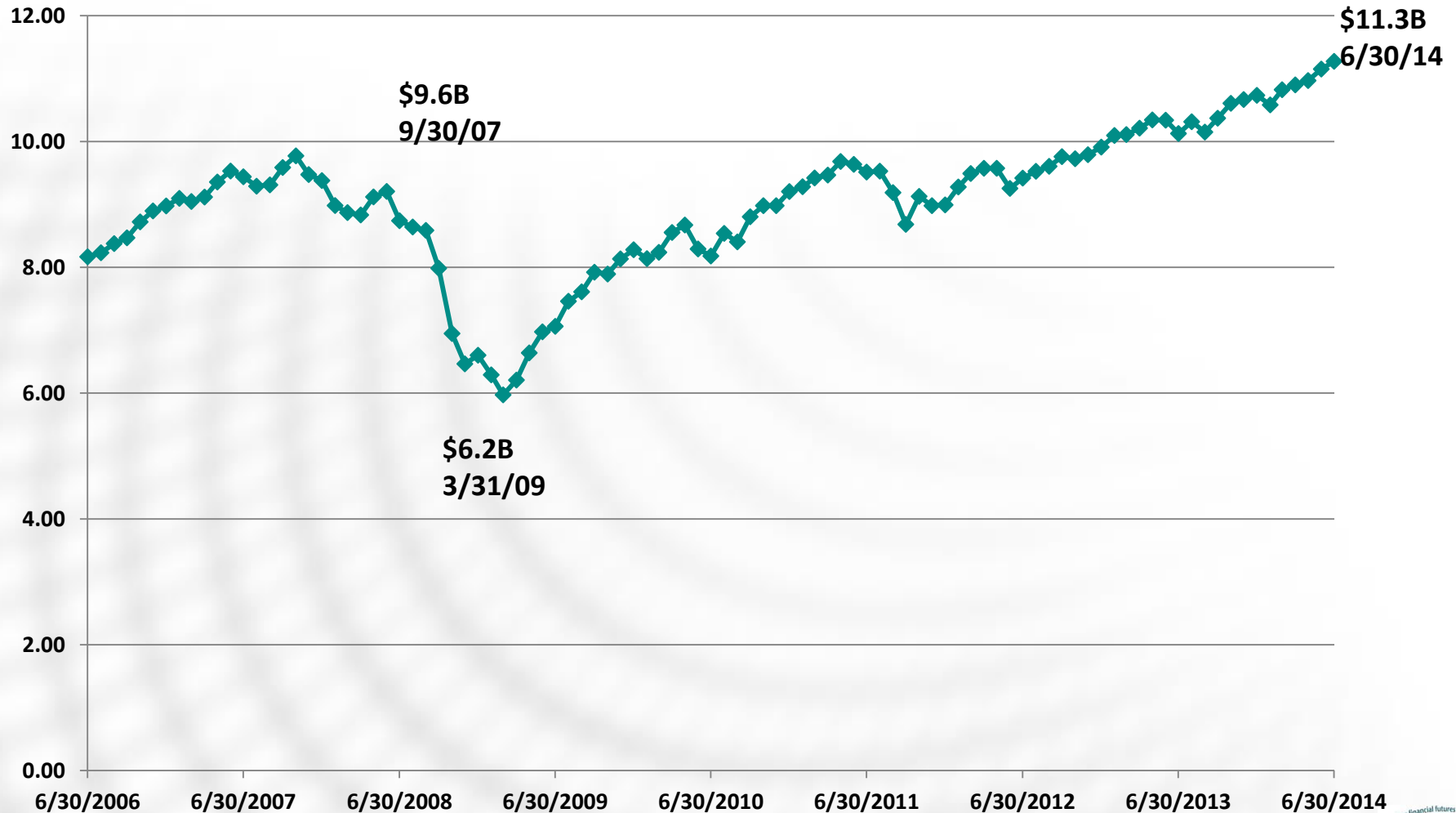
NMERB Annualized Returns
As of June 30, 2014
Net of fees



Actual vs. Policy – Periods Ending June 30, 2014



ERB Assets: June 2006- June 2014



Strategy to Meet Investment Return Goal

- Goal #1: Achieve a long-term, return at least equal to our actuarial assumption of 7.75%.
- Goal #2: Decrease return volatility through diversification.
- Asset Allocation is the main tool, and **the** primary determinant of investment returns.

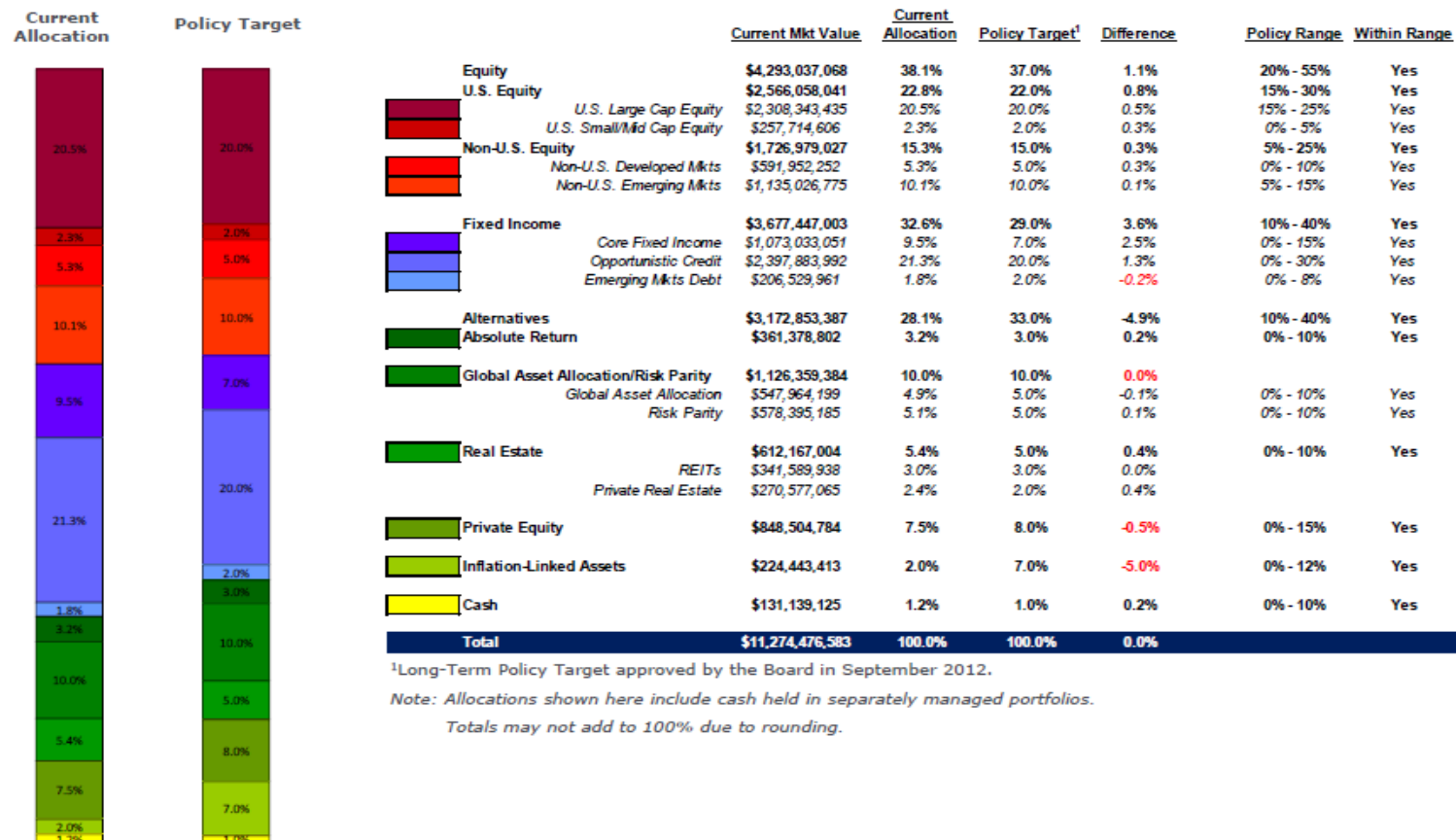
Strategy to Meet Investment Return Goal

	Current Target	NEPC/Staff Recommendation	70/30	5% Volatility	10% Volatility
Cash	1%	1%	1%	0%	0%
Large Cap Equities	20%	18%	40%	0%	20%
Small/Mid Cap Equities	2%	2%	5%	0%	5%
Int'l Equities (Unhedged)	5%	5%	15%	0%	20%
Emerging Int'l Equities	10%	10%	10%	0%	5%
Total Equity	37%	35%	70%	0%	50%
Core Bonds	7%	6%	19%	0%	50%
Global Bonds (Hedged)	0%	0%	0%	100%	0%
Opportunistic/Private Debt	20%	20%	10%	0%	0%
EMD	2%	2%	0%	0%	0%
Total Fixed Income	29%	28%	29%	100%	50%
Private Equity	8%	11%	0%	0%	0%
Private Real Assets	7%	8%	0%	0%	0%
Real Estate	5%	7%	0%	0%	0%
Hedge Funds	3%	0%	0%	0%	0%
Total Alternatives	23%	26%	0%	0%	0%
Global Asset Allocation	5%	5%	0%	0%	0%
Risk Parity	5%	5%	0%	0%	0%
Total Other	10%	10%	0%	0%	0%
Expected Return (5-7 Year)	7.6%	7.8%	6.7%	1.4%	5.3%
Expected Cost (bps)	0.81%	0.87%	0.29%	0.09%	0.16%
Expected Cost (\$\$)	\$89,100,000	\$95,700,000	\$31,900,000	\$9,900,000	\$17,600,000
Standard Dev of Asset Return	14.1%	14.5%	13.9%	5.0%	9.9%
Sharpe Ratio	0.43	0.43	0.37	-0.02	0.38
Sortino Ratio	0.67	0.65	0.57	0.31	0.67
Expected Return (30-Year)	8.4%	8.6%	7.9%	3.1%	6.8%
Sharpe Ratio	0.33	0.33	0.30	-0.12	0.31
Probability of 1-Year Return < 0%	29.6%	29.7%	31.6%	39.1%	29.7%
Probability of 5-Year Return < 0%	11.6%	11.7%	14.2%	26.8%	11.6%
Probability of 1-Year Return > 7.75%	49.5%	50.0%	46.9%	10.1%	40.2%
Probability of 5-Year Return > 7.75%	48.8%	50.0%	43.2%	0.2%	28.9%

ERB Investment Holdings June 30, 2014

New Mexico Educational Retirement Board

Total Fund Asset Allocation vs. Policy Targets

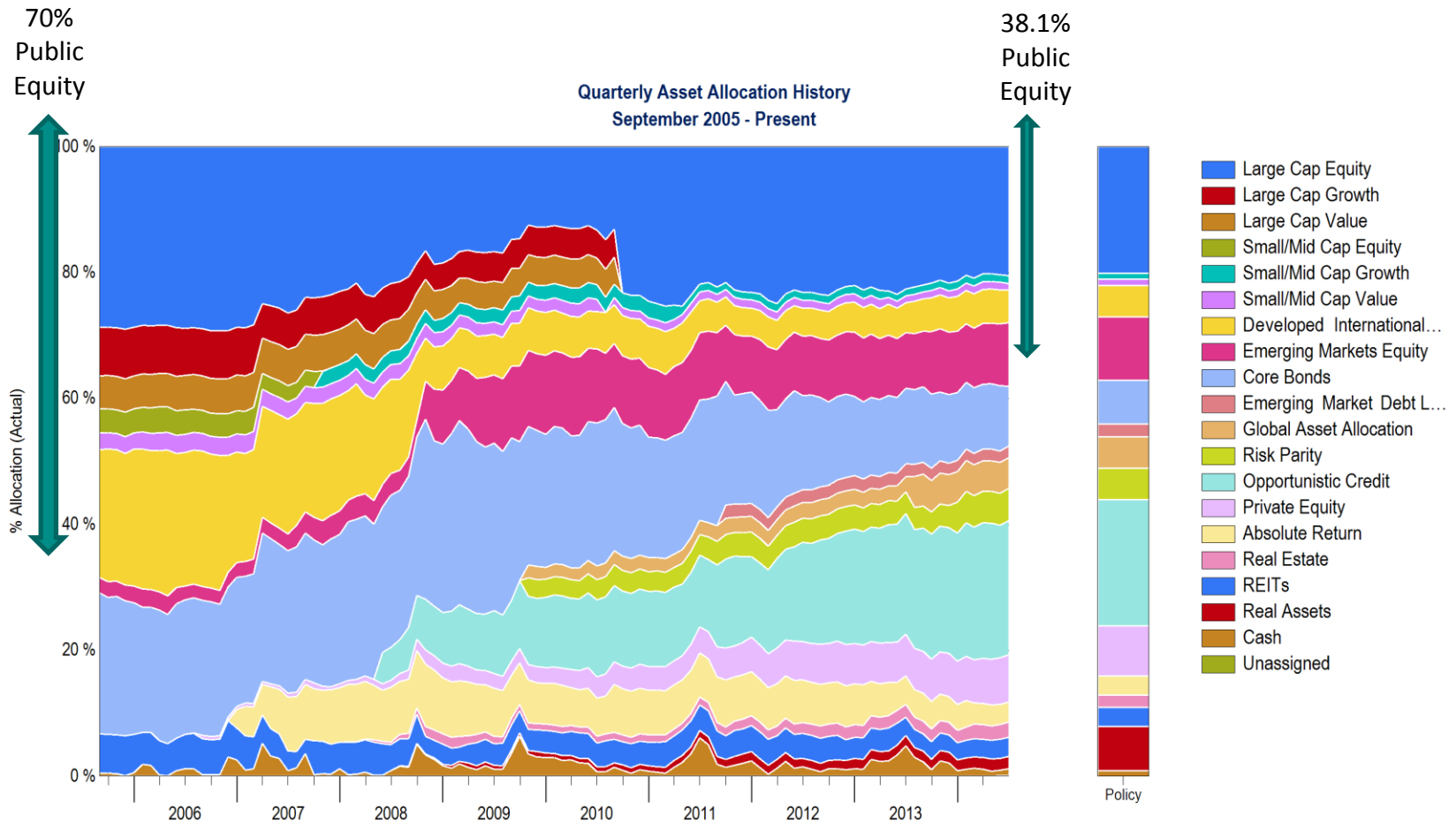


¹Long-Term Policy Target approved by the Board in September 2012.

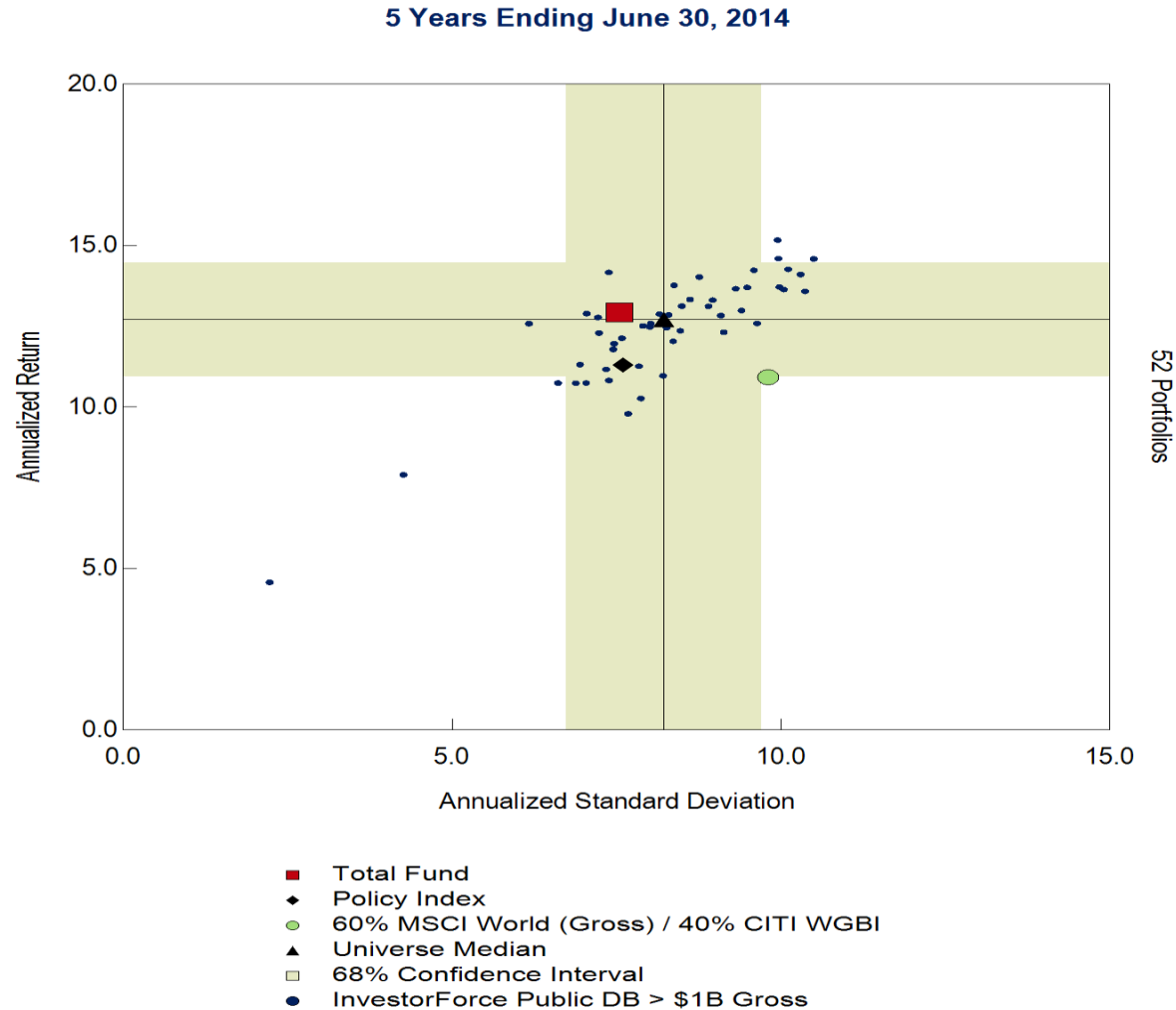
Note: Allocations shown here include cash held in separately managed portfolios.

Totals may not add to 100% due to rounding.

Asset Allocation History



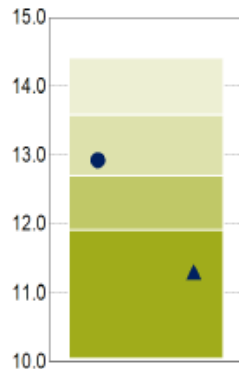
Risk and Return: Five Years



Risk and Return: 5 Yr ERB Peer Comparison

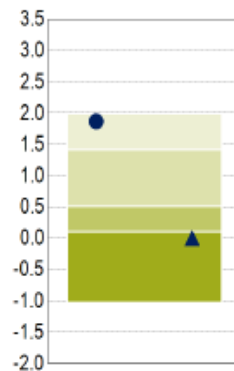
Total Fund vs. IFx Public DB > \$1B Gross (USD) (peer)
5 Years

Anlzd Return



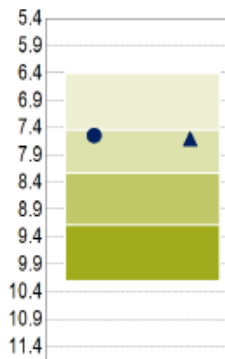
● Total Fund	
Value	12.9
%tile	38
▲ Policy Index	
Value	11.3
%tile	79
Universe	
5th %tile	14.4
25th %tile	13.6
Median	12.7
75th %tile	11.9
95th %tile	10.1

Anlzd Alpha



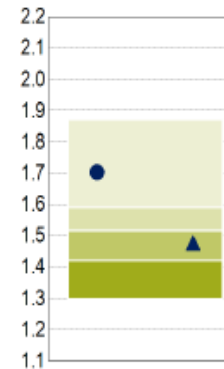
● Total Fund	
Value	1.9
%tile	9
▲ Policy Index	
Value	0.0
%tile	78
Universe	
5th %tile	2.0
25th %tile	1.4
Median	0.5
75th %tile	0.1
95th %tile	-1.0

Anlzd Standard Deviation



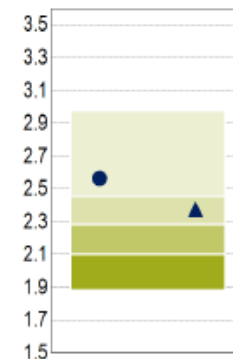
● Total Fund	
Value	7.5
%tile	31
▲ Policy Index	
Value	7.6
%tile	32
Universe	
5th %tile	6.4
25th %tile	7.4
Median	8.2
75th %tile	9.2
95th %tile	10.2

Sharpe Ratio



● Total Fund	
Value	1.7
%tile	13
▲ Policy Index	
Value	1.5
%tile	59
Universe	
5th %tile	1.9
25th %tile	1.6
Median	1.5
75th %tile	1.4
95th %tile	1.3

Sortino Ratio



● Total Fund	
Value	2.6
%tile	18
▲ Policy Index	
Value	2.4
%tile	36
Universe	
5th %tile	3.0
25th %tile	2.5
Median	2.3
75th %tile	2.1
95th %tile	1.9

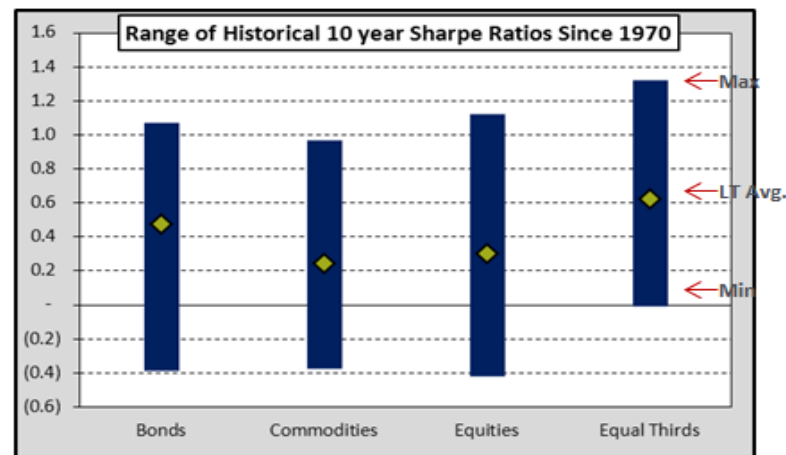
Risk and Return: 5 Year Asset Class Profile



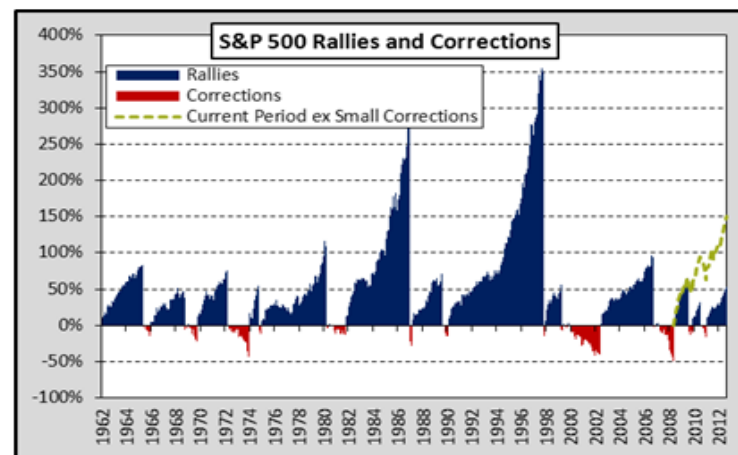
Appendix

NEPC 2014 Focused Actions for Public Funds

- **Historically strong performance for one asset class does not signal the ruin of diversification**
 - In fact, periods following these runs are often when diversification is most rewarded
- **Discipline of diversification requires a long-term focus to withstand concentrated results**
 - Both good (U.S. Equities in 2013)...
 - And bad (2008)
- **Over the long term, diversified portfolios will likely produce better risk-adjusted returns than concentrated ones**
- **Concentrated portfolios will correct after long bull runs**



Source: Bloomberg, NEPC



Source: Morningstar as of 10/31

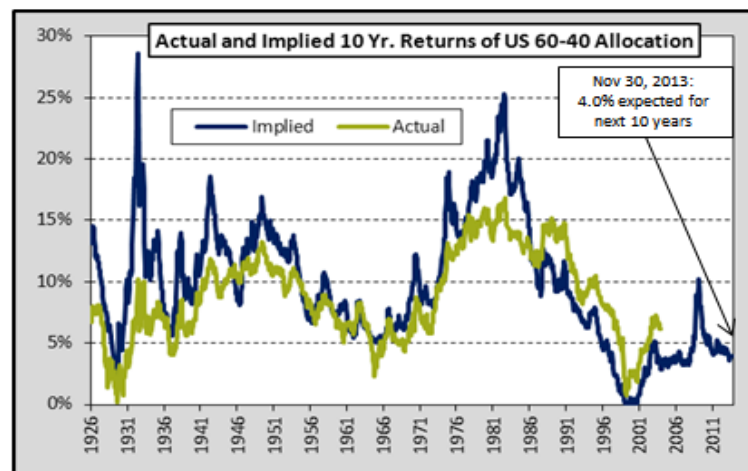
NEPC 2014 Focused Actions for Public Funds

Discipline and discretion are required despite markets moving higher

- **Market conditions remain calm**
 - Equity volatility remains near secular lows while prices continue to move higher
 - Credit spreads continue to tighten
 - Markets have been much more resilient to macro news recently
- **Strong returns and tranquil markets can lead to a false sense of comfort**
 - Rebalancing remains critical
 - A willingness to forgo some upside can lead to better outcomes over a full market cycle after markets correct
- **Return expectations are even more compressed following strong rally**
 - Low yields limit potential return
 - Diversification, active management, and risk management can be used to navigate challenging environment rather than simply stretching for returns through increased risk



Source: Bloomberg as of 11/30

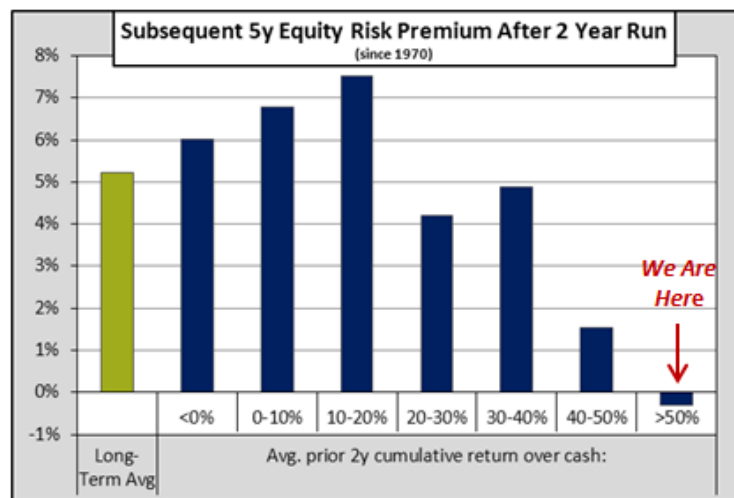


Source: Shiller Data, Bloomberg, NEPC

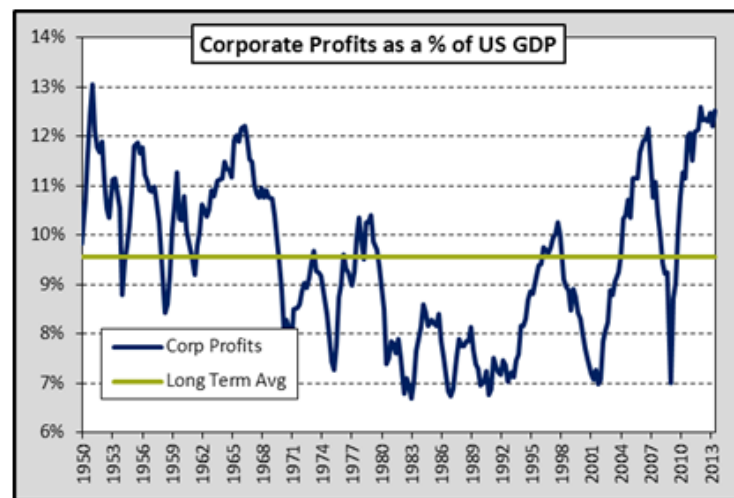
2014 Focused Actions for Public Funds

How much further can U.S. equities run?

- **S&P 500 has gained more than 53% cumulatively over the last two years (as of Dec. 31)**
 - Historically, this has led to subdued performance looking forward
- **With accommodative monetary policy, U.S. stock market could continue to grind higher**
 - Further upside (likely driven by more valuation expansion) seems unsustainable given how far markets have run
- **Strength of corporate profits has supported equity rally**
 - Corporate profits have historically shown mean reversion
 - Supported in the short-term by low financing costs for corporations

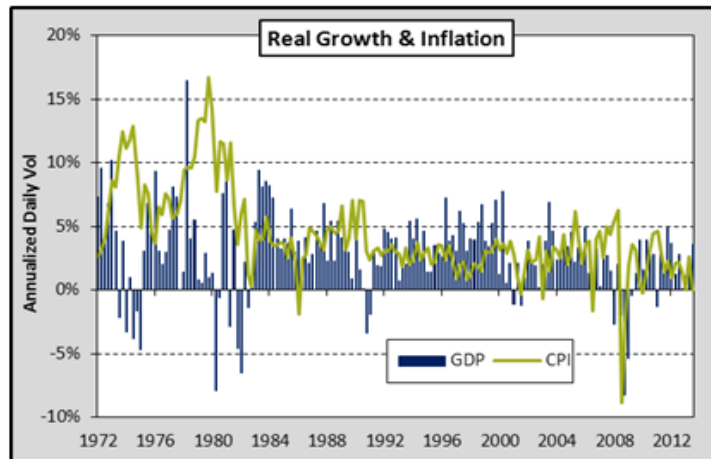


(Eq. Risk Premium is over cash) Source: Bloomberg, NEPC

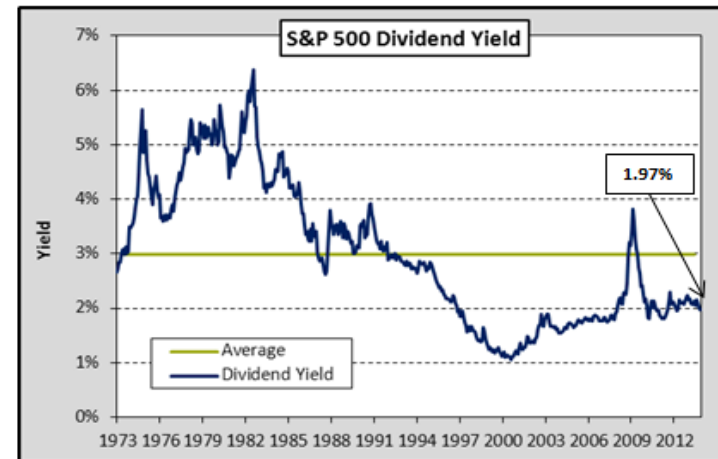


Source: Bloomberg as of 6/30

U.S. Large Cap Equity Building Blocks



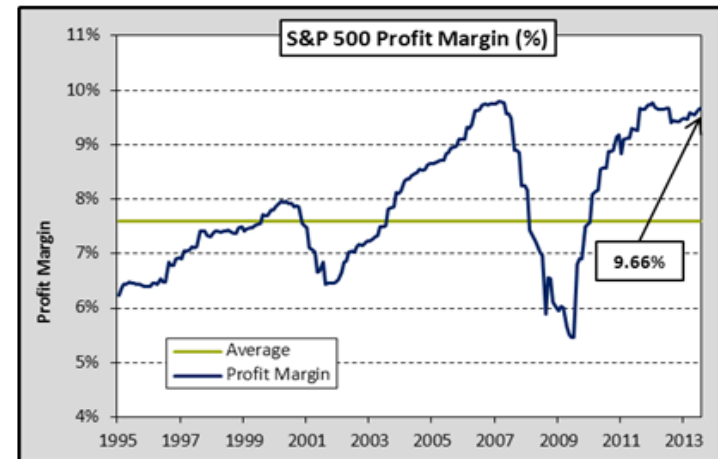
Source: Bloomberg as of 11/30



Source: Bloomberg as of 11/30



Source: Bloomberg as of 11/30



Source: Bloomberg as of 11/30

2014 5-to-7 Year Return Forecasts

Geometric Expected Return			
Asset Class	2013	2014	2014-2013
Cash	0.75%	1.50%	0.75%
Treasuries	1.00%	2.00%	1.00%
IG Corp Credit	3.00%	3.50%	0.50%
MBS	2.50%	2.25%	-0.25%
Core Bonds*	2.04%	2.53%	0.42%
TIPS	1.50%	2.50%	1.00%
High-Yield Bonds	5.00%	4.50%	-0.50%
Bank Loans	5.00%	5.00%	
Global Bonds (Unhedged)	0.75%	1.25%	0.50%
Global Bonds (Hedged)	0.93%	1.38%	0.45%
EMD External	4.00%	5.00%	1.00%
EMD Local Currency	5.00%	5.75%	0.75%
Large Cap Equities	6.75%	6.25%	-0.50%
Small/Mid Cap Equities	7.00%	6.25%	-0.75%
Int'l Equities (Unhedged)	7.75%	7.25%	-0.50%
Int'l Equities (Hedged)	8.00%	7.50%	-0.50%
Emerging Int'l Equities	9.75%	9.50%	-0.25%
Private Equity	9.00%	8.75%	-0.25%
Private Debt	8.50%	8.00%	-0.50%
Private Real Assets	8.00%	7.75%	-0.25%
Real Estate (Core)	6.00%	6.25%	0.25%
Commodities	5.00%	5.00%	
Hedge Funds	n/a	5.50%	